

## SEQUENCE LISTING

RECEIVED  
JAN 15 2003  
TECH CENTER 1503/2003

110> Edwards, David L.  
Hernstadt, Corinna  
Wilcox, Edward R.  
Wong, Siu-Yin

111> Process for Altering the Host Range of *Bacillus thuringiensis* Toxins, and  
Novel Toxins Produced Thereby

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<140> US 10/035,060

<141> 2001-12-27

<150> US 09/405,788

<151> 1999-09-27

<150> US 08/855,160

<151> 1997-05-13

<150> US 08/580,781

<151> 1995-12-29

<150> US 08/420,615

<151> 1995-04-10

<150> US 08/097,808

<151> 1993-07-27

<150> US 07/980,128

<151> 1992-11-23

<150> US 07/803,920

<151> 1991-12-06

<150> US 07/356,599

<151> 1989-05-24

<150> US 06/904,572

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<150> US 06/808,129

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 Trp Gly Ile Phe Gly Pro Ser Gln Trp Asp Ala Phe Leu Val Gln Ile  
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<213> Bacillus thuringiensis

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<213> *Bacillus thuringiensis*

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 Trp Gly Ile Phe Gly Pro Ser Gln Trp Asp Ala Phe Leu Val Gln Ile  
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 Tyr Val Gln Ala Ala Asn Leu His Leu Ser Val Leu Arg Asp Val Ser  
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 Val Phe Gly Gln Arg Trp Gly Phe Asp Ala Ala Thr Ile Asn Ser Arg  
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 Tyr Asn Asp Leu Thr Arg Leu Ile Gly Asn Tyr Thr Asp Tyr Ala Val  
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 Ile Arg Thr Val Ser Gln Leu Thr Arg Glu Ile Tyr Thr Asn Pro Val  
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 Gly Ser Ile Arg Ser Pro His Leu Met Asp Ile Leu Asn Ser Ile Thr  
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Ile Tyr Thr Asp Ala His Lys Gly Glu Tyr Tyr Trp Ser Gly His Gln  
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 Ile Met Ala Ser Pro Val Gly Phe Ser Gly Pro Glu Phe Thr Phe Pro  
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 Leu Tyr Gly Thr Met Gly Asn Ala Ala Pro Gln Gln Arg Ile Val Ala  
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 Gln Leu Gly Gln Gly Val Tyr Arg Thr Leu Ser Ser Thr Leu Tyr Arg  
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 Tyr Arg Lys Ser Gly Thr Val Asp Ser Leu Asp Glu Ile Pro Pro Gln  
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 Val Ser Met Phe Arg Ser Gly Phe Ser Asn Ser Ser Val Ser Ile Ile  
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 Arg Ala Pro Thr Phe Ser Trp Gln His Arg Ser Ala Glu Phe Asn Asn  
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 Tyr Ala Ser Thr Thr Asn Leu Gln Phe His Thr Ser Ile Asp Gly Arg  
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 Pro Ile Asn Gln Gly Asn Phe Ser Ala Thr Met Ser Ser Gly Ser Asn  
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 Leu Gln Ser Gly Ser Phe Arg Thr Val Gly Phe Thr Thr Pro Phe Asn  
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 Phe Ser Asn Gly Ser Ser Val Phe Thr Leu Ser Ala His Val Phe Asn  
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 Ser Gly Asn Glu Val Tyr Ile Asp Arg Ile Glu Phe Val Pro Ala Glu  
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Val Thr Phe Glu Ala Glu Tyr Asp Leu Glu Arg Ala Gln Lys Ala Val  
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 Thr Asp Tyr His Ile Asp Gln Val Ser Asn Leu Val Glu Cys Leu Ser  
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 Asp Glu Phe Cys Leu Asp Glu Lys Gln Glu Leu Ser Glu Lys Val Lys  
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 His Ala Lys Arg Leu Ser Asp Glu Arg Asn Leu Leu Gln Asp Pro Asn  
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 Asp Gly Glu Lys Cys Ala His His Ser His His Phe Ser Leu Asp Ile  
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 Asp Val Gly Cys Thr Asp Leu Asn Glu Asp Leu Gly Val Trp Val Ile  
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 Phe Lys Ile Lys Thr Gln Asp Gly His Ala Arg Leu Gly Asn Leu Glu  
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Val Asn Ser Gln Tyr Asp Gln Leu Gln Ala Asp Thr Asn Ile Ala Met  
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 Lys Gly His Val Asp Val Glu Glu Gln Asn Asn Gln Arg Ser Val Leu  
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 Ala Pro Ser Val Pro Ala Asp Tyr Ala Ser Val Tyr Glu Glu Lys  
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 Ser Tyr Thr Asp Gly Arg Arg Glu Asn Pro Cys Glu Phe Asn Arg  
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 Gly Tyr Arg Asp Tyr Thr Pro Leu Pro Val Gly Tyr Val Thr Lys  
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<223> synthetic DNA fragment used to insert point mutations into  
pEW3 to create the plasmid pACB-1.

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tagtaatagt agtgtaagta taataagagc t 151